# ENVIRONMENTAL AND RESOURCE ECONOMICS @ NCSU



Environmental and Resource Economics students at NCSU use econometrics, computational methods and theory to answer important and timely policy questions related to climate change, energy, health, development, natural resource management and the benefits and costs of environmental regulations. Students are exposed to frontier research through coursework and the Triangle Resource and Environmental Economics (TREE) seminar series. They also have opportunities to present their research at the Center for Environmental and Resource Economics Policy (CEnREP) colloquium, and can participate in Camp Resources, an NCSU-sponsored conference that brings together some of the best graduate students from around the world working in the field.

### **Faculty And their research interests:**

Zack Brown – global malaria control policy, behavioral economics, field experiments, survey methods

Paul L. Fackler - dynamic resource management; risk management; computational methods

<u>Harrison Fell</u> – renewable energy, emissions trading systems, electricity regulation

Raymond Guiteras - benefits of sanitation programs and clean water, climate change impacts in the developing world

Mitch Renkow – poverty alleviation, agro-environmental policies in the developing world

Wally Thurman – economics of land conservation policies, U.S. agro-environmental policy, resources (e.g., forestry and fisheries)

Roger von Haefen - non-market valuation, water, outdoor recreation, transport

### **Recent selected publications:**

- H. Fell and D. Kaffine, 2018. The Fall of Coal: Joint Impacts of Fuel Prices and Renewables on Generation and Emissions. *American Economic Journal: Economic Policy*, [In press]
- Z. S. Brown, R. A. Kramer, 2017. Preference Heterogeneity in the Structural Estimation of Efficient Pigovian Incentives for Insecticide Spraying to Reduce Malaria. *Environmental and Resource Economics*, [In press.]
- R. Guiteras et. Al, 2017. Microcredit and Willingness to Pay for Environmental Quality: Evidence from a Randomized-Controlled Trial of Finance for Sanitation in Rural Cambodia. *Journal of Environmental Economics and Management*, 86: 121-140.

### **Recent graduate student placements:**

- Boise State University
- RTI International
- Oregon State University
- East Carolina University

**Interested in learning more?** Click <u>here</u>.



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## **ECG 715 – ENVIRONMENTAL ECONOMICS**

ECG 715 surveys environmental policy design and benefit-cost analysis from both theoretical and empirical perspectives. Topics covered include externalities, public goods, market failure, instrument choice, discounting and nonmarket valuation. Special emphasis is placed on empirical energy and valuation applications.

# **ECG 716 – RESOURCE ECONOMICS**

ECG 716 surveys natural resource economics and management. The first half of the course covers foundational skills in the mathematical modeling of resource dynamics, and the second half covers a variety of cutting-edge topics in the literature including: adaptive management, partially observable Markov decision processes, bioeconomic modeling, dynamic optimization of disease spread and evolutionary processes, natural capital theory and sustainability.

# Field Courses in Environmental & Resource Economics

ECG 715 Offered Fall 2018 Time: MW 11:45am - 1:00pm

Professors: Roger von Haefen Harrison Fell

Questions: roger\_von\_haefen@ncsu.edu hfell@ncsu.edu

> ECG 716 Offered Spring 2019 Time: TBD

> > Professors: Paul Fackler Zack Brown

Questions: paul\_fackler@ncsu.edu zack\_brown@ncsu.edu